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## REFLECT

Ever heard the phrase “willing to be disturbed”? I hadn’t either—at least not in a way that made me pause—until this summer. Funny how one sentence can shift your entire perspective. Over just a few short weeks, that phrase came to define my experience, growth, and outlook on teaching.

Coming into this program, I felt like a brand-new student again. I was unsure, overwhelmed, and honestly a bit lost—just like a freshman navigating their first days of high school or college. Despite my background as an undergraduate, I had to let go of what I *thought* I knew. That meant confronting my own assumptions and becoming open to new ways of thinking, even when it felt uncomfortable. That’s where being “willing to be disturbed” came in. It meant giving myself permission to grow—and sometimes that growth came through challenge and disruption.

This mindset changed everything. I began to reflect not only on my own journey but also on what it means to be a student in today’s world. For the first time, I truly felt what it was like to step into something unfamiliar. That empathy will shape how I teach. I now understand on a deeper level how vulnerable students might feel walking into a new classroom, especially one where they don’t yet feel seen or understood.

As a Research Experience for Undergraduates (REU) participant, I’ve gained more than just academic knowledge—I’ve gained vision. I’ve learned that being a

teacher today means constantly adapting. The traditional classroom structure doesn’t always serve our students anymore. We need to rethink our environments, our approaches, and the relevance of what we’re teaching. It’s not enough to deliver information; we need to spark curiosity, create meaning, and make connections to the real world.

This summer taught me that effective teaching starts with listening—being open to feedback, to discomfort, and to transformation. When we as educators are willing to be disturbed, we allow space for new ideas, for equity, and for growth—not just for ourselves, but for every student who walks through our doors.





## FIGURE SOMETHING OUT

How do you find your coworkers in a cornfield? It's a serious question—especially when you've just finished collecting data, the corn is towering over your head, and you need to regroup. The answer? A simple, time-tested game of *Marco Polo*. And surprisingly, it works.

When I imagined what my summer research experience would look like as a future math teacher, I definitely didn't picture myself in the middle of a cornfield yelling "Marco!" But there I was. And honestly, it changed everything.

This unexpected setting taught me something vital: I needed to be *willing to be disturbed*—open to experiences and perspectives that didn't fit neatly into my preconceived ideas about teaching. Our schedule revolved around the weather. We worked through tough conditions, and plans changed on a dime. One day it was corn, the next we were in an alfalfa field, keeping an eye out for cattle (yes, I had to stand up more than once to make sure I wasn't trampled). It was chaotic at times, but that chaos became the best teacher of all.

It made me reflect on how often we ask students to conform to rigid schedules, tight timelines, and predictable lesson plans. But real learning? It isn't always predictable. Just like in the field, conditions change, surprises happen, and we have to adapt.

What if we allowed more of that in our classrooms? What if we embraced a little mystery? One of the best things a student can ask is, "What are we going to learn today?" That question signals curiosity—and curiosity is the gateway to meaningful learning.

This summer, I realized that sparking that sense of wonder starts with letting go of control and leaning into the unknown. It starts with letting students explore, question, and experience learning in unexpected ways—just like I did.

Now, I'm excited to take these lessons back to my classroom: to build a space where students feel free to wonder, to be surprised, and maybe even play a little game of Marco Polo now and then.

Because sometimes, the best teaching happens where you least expect it—even in a cornfield.

## MAKE CONNECTIONS

Being the only math teacher among a group of elementary and science teachers wasn't what I expected when I joined a summer research experience. Sure, I knew the program focused on science educators, with a few elementary teachers mixed in—but I didn't realize I'd be the *only* math-focused REU participant.

At first, it felt a bit isolating. But that feeling quickly gave way to opportunity.

Collaborating with teachers from different disciplines opened my eyes to something I hadn't fully appreciated before: the powerful connections between math and science. While reviewing the science teacher atlas for curriculum standards, I was surprised to see how often math popped up—especially in areas like data analysis, measurement, and modeling. Suddenly, I saw how easily a math classroom could merge with science content, particularly in a statistics unit.

These discoveries sparked conversations. Many of the RET (Research Experience for Teachers) participants I worked with were excited about the idea of interdisciplinary projects.

## MAKE CONNECTIONS (Continued)

Some even suggested teaming up within their schools to create end-of-year projects that combined science and math—a way to bring subjects together and break up the routine of standard-driven instruction. Even a simple collaborative activity, they said, could breathe new life into the classroom and re-engage students.

As someone entering a new school this fall, with a new team and new students, I began to think about this in light of something I'd learned all summer: the importance of being *willing to be disturbed*. Change isn't always easy, and proposing something new can shake the atmosphere—but maybe that's the point. I don't expect sweeping changes overnight. But opening the door to collaboration? That's a step in the right direction.

An integrated approach could create a more engaging, curious learning environment—especially for students who might feel more connected to one subject than the other. And for teachers, it offers a chance to build stronger professional relationships and exchange ideas that push all of us forward.

Sometimes, stepping into a room where no one quite shares your background is exactly what you need—to see the possibilities no one's considered yet.

## PREPARE FOR WHAT'S NEXT

My mentor quickly had to embrace the phrase *“willing to be disturbed”* to work with our group of REUs—especially with me. I'm naturally competitive and loved racing to see who could collect data the most accurately and efficiently. This playful competition brought energy to our group and helped build strong bonds, making it easier to have deeper conversations about science, teaching, and future collaboration.

One part of the project I was particularly passionate about was diving into independent research on corn growth and the impact of cover crops. I explored whether these crops could benefit corn yields and how farmers use math and statistics daily. What struck me was how often students—especially those who may pursue agriculture—ask, “When will I ever use this math?” This experience gave me a real, grounded answer.

Driving through the Midwest, you pass cornfields everywhere—what better way to make math real than to connect it to something students see every day? This realization inspired me to start brainstorming ways to bring real-world agriculture data into my classroom.

Working with my mentor, I saw opportunities to adapt her actual research into my future statistics lessons. I could have students analyze data, interpret graphs, and draw conclusions. Of course, I'd emphasize that our classroom work uses small data samples and doesn't replace professional, peer-reviewed research. But having students compare their findings to hers could be a powerful learning experience. They'd see where they were close, where they missed the mark, and, most importantly, why it matters.

I also plan to invite my mentor to speak to my students—both to share her findings and to talk about her life as a scientist. Hearing how much math she uses in her research would help students see the subject through a new lens. She could also walk them through the different types of graphs and models she uses, giving them exposure to tools they might encounter in future careers.

This summer gave me more than just data—it gave me a network. I hope to keep in touch with my mentor, coworkers, and the REUs and RETs I worked with. The lessons I learned from them will shape my teaching for years to come.

